

## (12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization International Bureau



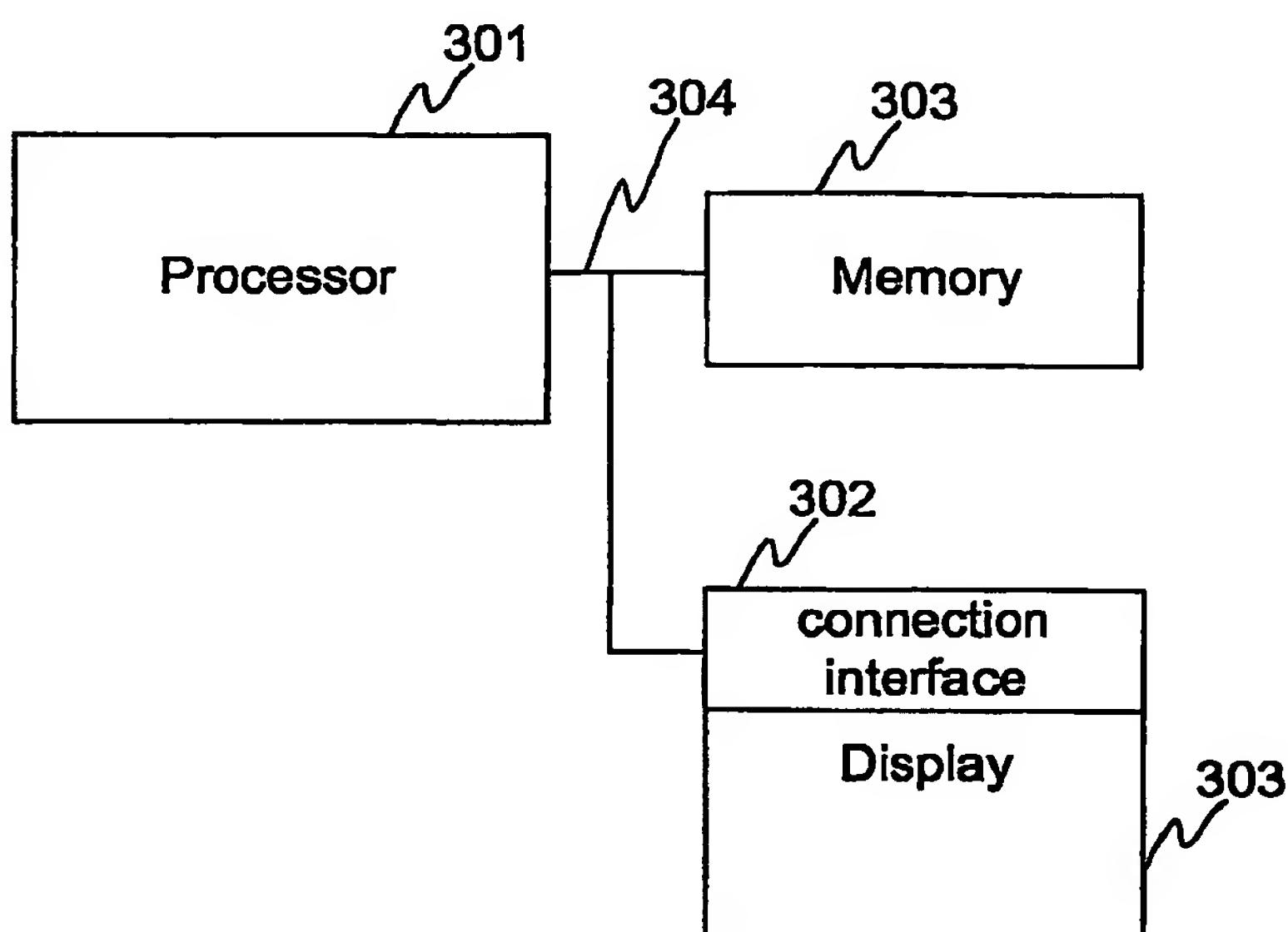
PCT

(43) International Publication Date  
23 December 2004 (23.12.2004)

(10) International Publication Number  
**WO 2004/111829 A1**

- (51) International Patent Classification<sup>7</sup>: **G06F 3/14,**  
13/12, G09G 5/39
- (21) International Application Number:  
**PCT/FI2004/050092**
- (22) International Filing Date: 14 June 2004 (14.06.2004)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:  
20035096 13 June 2003 (13.06.2003) FI
- (71) Applicant (*for all designated States except US*): **NOKIA CORPORATION [FI/FI]**; Keilalahdentie 4, FI-02150 Espoo (FI).
- (72) Inventor; and
- (75) Inventor/Applicant (*for US only*): **LAAKKONEN, Kauko [FI/FI]**; Polvitie 6 as. 5, FI-40200 Jyväskylä (FI).
- (74) Agent: **BERGGREN OY AB**; Ohjelmakaari 1, FI-40500 Jyväskylä (FI).
- (81) Designated States (*unless otherwise indicated, for every kind of national protection available*): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (*unless otherwise indicated, for every kind of regional protection available*): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).
- Published:**
- with international search report
  - before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments
- For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.*

(54) Title: METHOD AND ARRANGEMENT FOR FITTING AN IMPROVED DISPLAY DEVICE INTERFACE BETWEEN A DISPLAY DEVICE AND A PROCESSOR



(57) Abstract: The invention relates to the connecting of an improved, intelligent display device interface to a processor that controls the display device through the display device interface. The arrangement according to the invention comprises a display device (303), an intelligent connection interface (302) of the display device and a processor (301) controlling the display device. In addition, the arrangement comprises a memory bus (304) connected to the processor in order to realize the signaling between the processor (301) and the display device connection interface (302), and an adapter circuit (402) for matching the signals between the memory bus (401, 510) and the display device connection interface (404, 540).